

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. - 7. (Canceled).
8. (New) A method of manufacturing a transistor comprising:  
preparing a substrate;  
forming a semiconductor film on the substrate;  
forming a first region in the semiconductor film by applying a first impurity atom to the semiconductor film;  
forming an insulator film over the semiconductor film;  
forming a gate electrode over the insulator film; and  
forming a second and a third region in the semiconductor film by applying a second impurity atom to the semiconductor film after the forming of the first region, the second and the third region being separated by the first region, and the first impurity atom and the second impurity atom being different.
9. (New) The method of manufacturing a transistor according to claim 8, the semiconductor film having a channel region under the gate electrode, the channel region not including any of the first and the second impurity atom.
10. (New) The method of manufacturing a transistor according to claim 9, the first region being located inside the channel region.
11. (New) The method of manufacturing a transistor according to claim 10, the first region being separated into a plurality of portions.
12. (New) The method of manufacturing a transistor according to claim 9, a part of the first region being protruded to the second region and the third region from the channel region.

13. (New) The method of manufacturing a transistor according to claim 9, the first region being separated into a first part and a second part by the channel region, the first part being located between the first region and the channel region, and the second part being located between the second region and the channel region.

14. (New) The method of manufacturing a transistor according to claim 8, further comprising:

using the gate electrode as a mask to apply the second impurity atom.

15. (New) The method of manufacturing a transistor according to claim 8, further comprising:

applying an energy to the semiconductor film to crystallize the semiconductor film before the forming of the third region.

16. (New) The method of manufacturing a transistor according to claim 8, further comprising:

forming a source and a drain electrode, the source electrode being connected to the first region, the drain electrode being connected to the second region, and none of the source and the drain electrode being connected to the first region.

17. (New) A method of manufacturing an active-matrix substrate using the method of manufacturing a transistor according to claim 8.

18. (New) A method of manufacturing an electroluminescent device using the method of manufacturing a transistor according to claim 8.

19. (New) A method of manufacturing a display device using the method of manufacturing a transistor according to claim 8.

20. (New) A method of manufacturing an electronic apparatus using the method of manufacturing a transistor according to claim 8.